

Applicant: Darrel L. Turner
Application No.: 08/532,046
Art Unit: 3501

c1
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1. (Twice Amended) A process for forming a rotary cutting blade, comprising the steps of

- a) working a blank of boron steel to have a bevelled cutting edge; and
- b) heat treating the formed blank to elevate the blank hardness to between 48 and 55 on the Rockwell Hardness Scale to thereby form a rotary cutting blade having [Charpty] Charpy Notch toughness of at least 15 ft.lb[.], wherein the heat treating step comprises austempering the formed blank.

2. (Twice Amended) A process for forming a rotary cutting blade, comprising the steps of:

- c2
- a) working a blank of boron steel to have a bevelled cutting edge; and
 - b) heat treating the formed blank to elevate the blank hardness to between 48 and 55 on the Rockwell Hardness Scale to thereby form a rotary cutting blade having [Charpty] Charpy Notch toughness of at least 15 ft.lb, wherein the heat treating step comprises marquenching the formed blank.

3. (Twice Amended) A process for forming a rotary cutting blade, comprising the steps of:

- 13
- a) working a blank of boron steel to have a bevelled cutting edge; and
 - b) heat treating the formed blank to elevate the blank hardness to between 48 and 55 on the Rockwell Hardness Scale to thereby form a rotary cutting blade having [Charpty] Charpy Notch toughness of at least 15 ft.lb, wherein the heat treating step comprises quenching the formed blank in a liquid selected from the group consisting of oil, polymer, or water, and tempering the quenched blank.